

broad, considerably more than half the whole length of tegmina, which has brought about the shortening of the three p per ulnar areas.

Genus HETEROPSALTRIA.

Heteropsaltria, Jacobi, SB. Ges. naturf. Fr. Berl. 1902, p. 73.

Type, *H. aliena*, Jacobi.

L.—*New Ground-Squirrels of the Xerus erythropus Group.*

By OLDFIELD THOMAS.

IN working out some ground-squirrels from Lake Chad presented by Capt. G. B. Gosling to the British Museum I have examined all the specimens assigned to *Xerus erythropus*, and find that, although very similar throughout the vast range of the group, they can be divided into two species by the size of their premolars, the East-African animal having these teeth noticeably smaller than in the other cases.

Of each of these two species again there is evidence of several geographical subspecies, so that six forms are distinguishable, as in the following synopsis:—

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|--|-------------------------------|
| A. Posterior upper premolar large, subquadran- | |
| gular. | |
| a. Back near clay-colour; forearms buff. | |
| a ² . West Africa | <i>X. erythropus</i> , Geoff. |
| b ² . Abyssinia and Egyptian Soudan | <i>X. e. leucoumbrinus</i> , |
| b. Colour lighter; back near "pinkish buff"; | [Rüpp. |
| forearms "cream-buff." Lake Chad | <i>X. e. chadensis</i> , |
| c. Back blackened, approaching "mummy- | [subsp. n. |
| brown"; forearms "cinnamon." Unyoro. | <i>X. e. lacustris</i> , |
| B. Posterior upper premolar small, cylindrical. | [subsp. n. |
| a. Back dull clay-colour; forearms dull buffy . | <i>X. microdon</i> , sp. n. |
| b. Back tawny ochraceous; forearms between | [subsp. n. |
| "ochraceous" and "clay-colour" | <i>X. m. fulvior</i> , |

All the current synonyms of *X. erythropus* are West African and referable to the typical subspecies, except Rüppell's *leucoumbrinus*, which will stand for the very similar Soudanese and Abyssinian animal.

Xerus erythropus chadensis, subsp. n.

Similar in general characters to Upper Nile examples of *X. e. leucoumbrinus*, but the colour much lighter throughout.

General dorsal area between "pinkish buff" and "buff," lightening on the limbs to "cream-buff." Head and fore-back less uniform, more heavily lined with blackish. Intermediate band between the white lateral line and the white of the belly darker than the general colour, more or less mixed with blackish. Under surface very short-haired, partly naked in the axillary and inguinal regions, white. Upper surface of hands and feet cream-buff. Short-haired part of tail darker buffy. Long hairs of tail, as seen from below, buff basally, occasionally approaching ochraceous buff, then cream-buff, with a subterminal ring of black and a broad cream-buff tip. In *X. e. leucoumbrinus* the basal part of the tail-hairs is ordinarily "ochraceous buff" or even "ochraceous."

Skull apparently quite as in *leucoumbrinus*, the posterior premolar proportionally large; rounded-quadrangular, not small as in the East-African species.

Dimensions of the type (measured in the flesh):—

Head and body 262 mm.; tail 240; hind foot 63.

Skull: greatest length 61·7; basilar length 49; zygomatic breadth 33; palate length from henselion 30·3; front of large premolar to back of m^3 11·3; breadth of large premolar 3·5.

Hab. Yo, Lake Chad.

Type. Adult male. Original number 44. Collected 11th October, 1904, and presented by Capt. G. B. Gosling. Four specimens.

Xerus erythropus lacustris, subsp. n.

Colour darker than in any of the allied forms, the back heavily blackened, so as nearly to match Ridgway's "mummy-brown." Crown still darker, glossy blackish, speckled with buffy. Area below white lateral line broader than usual, finely speckled blackish. Under surface even more thinly haired than usual, dull buffy whitish along the middle line, the sides of the belly buffy, as are the inner sides of the limbs and the upper surface of the hands and feet. Forearms dark ochraceous clay-colour. Hairs of upper side of tail black at their bases, those of the lower side ochraceous buff basally.

Skull with the large premolars characteristic of *X. erythropus*, contrasting in this respect with the geographically allied *X. microdon*.

Dimensions of the type:—

Head and body 305 mm.; tail 240; hind foot 64.

Skull: greatest length 64; basilar length 50; zygomatic breadth 32·5; palate length from henselion 30·3; front of large premolar to back of m^3 12; breadth of posterior upper premolar 3·8.

Hab. Masindi, Unyoro.

Type. Adult female. B.M. no. 2. 11. 1. 5. Collected 23rd June, 1897, by Dr. W. J. Ansorge.

An isolated skull and two young skins collected by Emin Pasha in Monbuttu appear also to be referable to this form.

Xerus microdon, sp. n.

General colour above tawny clay-colour, becoming more blackish on the crown and muzzle, more ochraceous on the base of the tail. White markings as in *X. erythropus*. Dark area below lateral line blackish brown. Sides of belly and inner sides of limbs washed with pale buffy. Forearms dull buffy. Upper surface of hands and feet cream-buff. Bases of tail-hairs strong ochraceous buff.

Skull as usual. Posterior upper premolar comparatively small, cylindrical.

Dimensions of the type (measured on the skin):—

Head and body 285 mm.; tail 225; hind foot (wet) 63.

Skull: greatest length 62; basilar length 49; zygomatic breadth 33; palate length from henselion 29; front of large premolar to back of m^3 12; diameter of large upper premolar 3.

Hab. British East Africa. Type from Kitui, alt. 1000 m.; other specimens from Ukambani (*Jackson*).

Type. Adult male. B.M. no. 1. 2. 5. 4. Original number 51. Collected 20th September, 1900, and presented by S. L. Hinde, Esq.

Xerus microdon fulvior, subsp. n.

Similar in all essential characters to true *microdon*, but the colours richer, darker, and more tawny throughout. Back tawny ochraceous, becoming deep rufous on rump; hands, wash along sides of belly, hind limbs, and top of feet ochraceous buff instead of buffy or cream-buff. Forearms between ochraceous and clay-colour. Bases of tail-hairs dark tawny.

Dimensions of type:—

Head and body 295 mm.; tail (imperfect); hind foot 62.

Skull: greatest length 64·5.

Hab. Fort Hall, Mt. Kenya district. Alt. 1300 m.

Type. Adult male. B.M. no. 3. 11. 1. 4. Original number 170. Collected 10th June, 1903, and presented by S. L. Hinde, Esq. Two specimens.

LI.—*A new Subspecies of Glossina palpalis, Rob.-Desv., the Disseminator of Sleeping Sickness.* By ERNEST E. AUSTEN.

THE British Museum has just received from Dr. F. Creighton Wellman, of Benguella, W. Africa, some specimens of a tsetse-fly which, though obviously belonging to *Glossina palpalis*, Rob.-Desv., are sufficiently distinct from the typical form to be regarded as representing a new subspecies, which may be termed *Glossina palpalis Wellmani*, subsp. n.

The new subspecies may be characterized shortly as follows, by indicating the points in which it differs from the typical form :—

Glossina palpalis Wellmani, subsp. n.

♂ ♀.—Frontal stripe pale ochraceous; thoracic markings much reduced, so that *the thorax in a well-preserved specimen appears spotted*, the antero-lateral markings taking the form of spots or blotches; the *spot immediately behind the inner extremity of the humeral callus* on each side small, ovoid, or nearly circular, and especially conspicuous when the insect is viewed from above and slightly from behind; femora pale, the dark blotches much reduced.

Katumbela River, Angola, W. Africa; November 1904 (*Dr. F. C. Wellman*). Six specimens (1 ♂, 5 ♀ ♀). Types in British Museum.

Writing from Benguella, under date Feb. 5, 1905, Dr. Wellman says :—"I took about eighty specimens of these tsetse-flies in four days along the banks of the Katumbela River, two days from the coast, in the height of the rainy season."

The above specimens are of especial interest as being the first recorded examples of any form of *Gl. palpalis* from Portuguese West Africa and as showing that the range of the species in question, which has recently been stated by Laveran* to occur at Sengaleam (about thirty miles from

* 'Comptes Rendus,' t. cxxxix. (séance du 31 Octobre, 1904) p. 659.